AMD RYZEN™ 7 9850X3D DESKTOP PROCESSOR

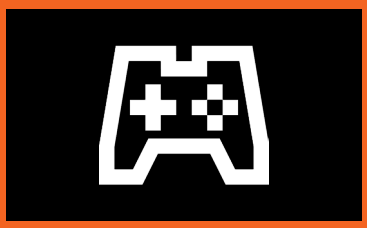
The Ultimate Gaming Processor Just Got Faster

Built using 2nd Gen AMD 3D V-Cache™ technology to provide an incredible boost in gaming performance, the AMD Ryzen™ 7 9850X3D processor is designed to be faster than system memory. With a collosal on-chip cache memory bank, this processor is positioned for maximum power and effectiveness.

TARGET AUDIENCE

MAINSTREAM

CREATORS



GAMERS

SELL IT IN 30 SECONDS

INCREDIBLE POWER

- High-performance "Zen 5" core technology[1]
- A powerhouse processor for gaming and content creation
- 4nm manufacturing process

LEADERSHIP TECHNOLOGIES

- AMD 3D V-Cache™ technology for great gaming experiences
- AMD EXPO™ technology[2] with one-touch memory overclocking for more performance
- Boosted clock speed up to 5.6GHz delivers faster single-threaded performance[3,5]

DEPENDABLE LONGEVITY

- Platform upgradability to future, next-gen processors
- Fast DDR5 memory speeds
- Incredible bandwidth with PCIe® 5.0

PRODUCT SPECIFICATIONS

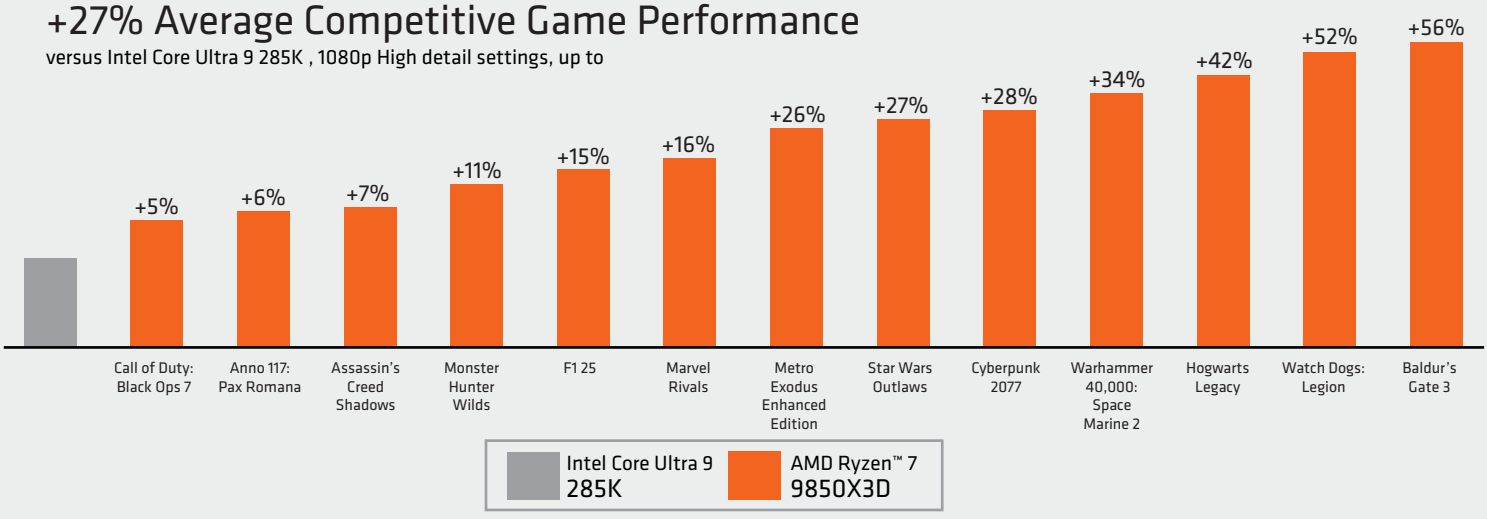
PROCESSOR	CORES/ THREADS	TYPICAL TDP	MAX/BASE FREQUENCY[3] (UP TO)	TOTAL CACHE L2 + L3	PCIE® GEN	UNLOCKED FOR OVERCLOCKING?[2]	COOLER INCLUDED	BUILT-IN AMD RADEON™ GRAPHICS	COMPETITIVE PROCESSOR
AMD Ryzen™ 7 9850X3D	8/16	120W	5.6 / 4.7 GHz	104 MB	5.0	Yes	No	Yes	Intel Core i9-14900K / Core Ultra 9 285K

THIS CHART ILLUSTRATES RELATIVE PRODUCT POSITIONING ON KEY FUNCTIONALITY AND IS NOT NECESSARILY AN INDICATION OF RELATIVE PERFORMANCE. PERFORMANCE MAY VARY BY APPLICATION.

AMD RYZEN™ 7 9850X3D PROCESSOR[4]

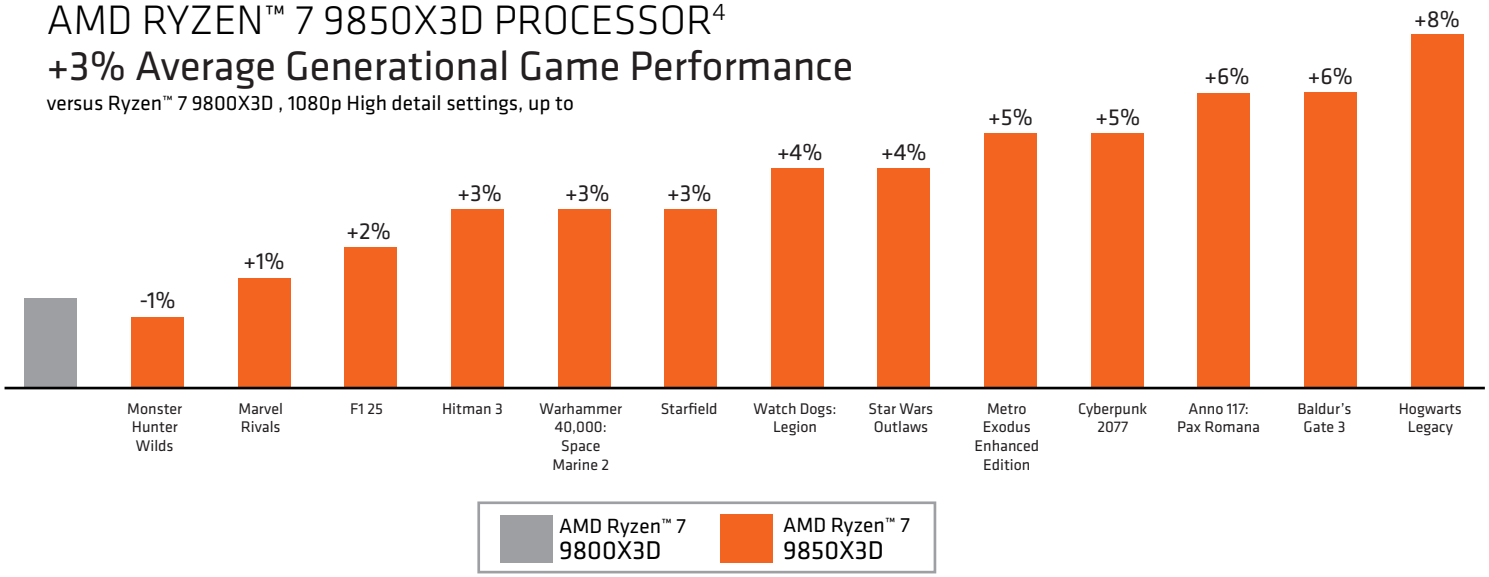
+27% Average Competitive Game Performance

versus Intel Core Ultra 9 285K , 1080p High detail settings, up to



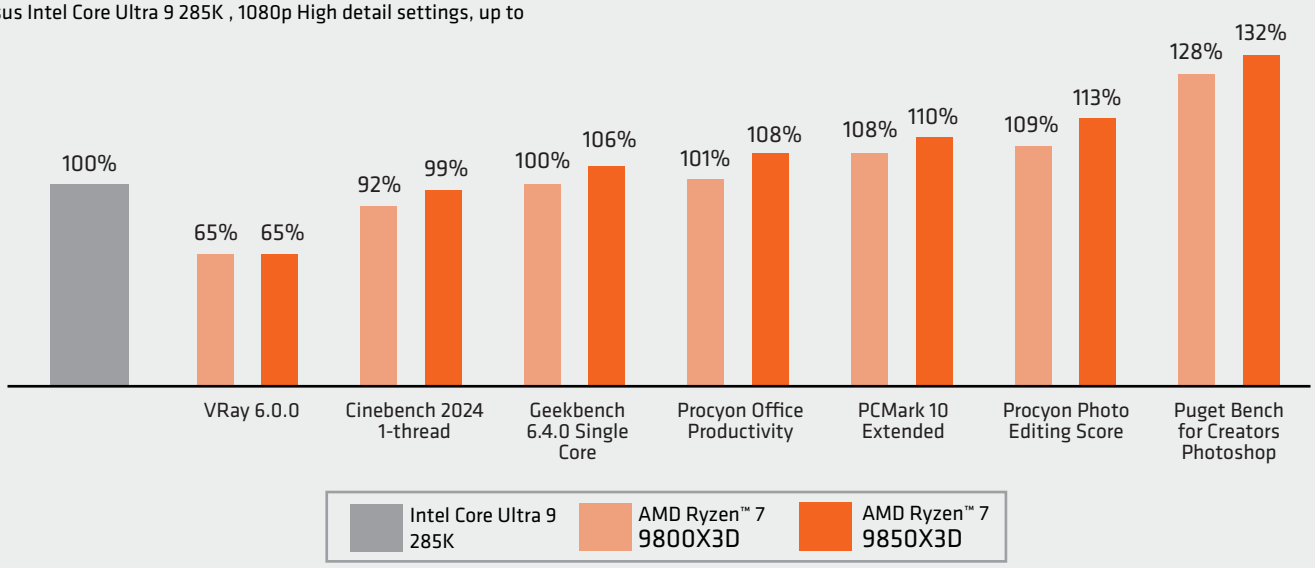
AMD RYZEN™ 7 9850X3D PROCESSOR[4]
+3% Average Generational Game Performance

versus Ryzen™ 7 9800X3D , 1080p High detail settings, up to



AMD RYZEN™ 7 9850X3D AND RYZEN™ 7 9800X3D PROCESSORS[5]
Productivity Performance

versus Intel Core Ultra 9 285K , 1080p High detail settings, up to



1. "Zen 5" is a codename for AMD architecture, and is not a product name. GD-122a
2. Overclocking and/or undervolting AMD processors and memory, including without limitation, altering clock frequencies / multipliers or memory timing / voltage, to operate outside of AMD's published specifications will void any applicable AMD product warranty, evenwhen enabled via AMD hardware and/or software. This may also void warranties offered by the system manufacturer or retailer. Users assume all risks and liabilities that may arise out of overclocking and/or undervolting AMD processors, including, without limitation, failure of or damage to hardware, reduced system performance and/or data loss, corruption or vulnerability. GD-106
3. Boost Clock Frequency is the maximum frequency achievable on the CPU running a bursty workload. Boost clock achievability, frequency, and sustainability will vary based on several factors, including but not limited to: thermal conditions and variations in applications and workloads. GD-150
4. Testing done by AMD performance labs December 2025, on a test system configured with Ryzen 7 9800X3D and 9850X3D CPUs, 32 GB DDR5-6000 Memory, Windows 11 Pro, X870E Motherboard, and Nvidia GeForce RTX 5090 (GeForce 581.29) against a similarly configured system with Intel Core Ultra 9 285K, Z890 Motherboard, and 32GB DDR5-8000 Memory comparing gaming performance in the following games: Anno 117: Pax Romana (DX12, High), Assassin's Creed Shadows (DX12, High), Avatar: Frontiers of Pandora (DX12, High), Borderlands 3 (DX12, High), Battlefield 6 (DX12, High), Baldur's Gate 3 (Vulkan, High), Black Myth: Wukong (DX12, High), Call of Duty: Black Ops 7 (DX12, Ultra), Counter-Strike 2 (DX12, High) (V2 Replay Used), Cyberpunk 2077 (DX12, High), DOOM: The Dark Ages (Vulkan, High), Dragon Age: The Veilgaurd (DX12, HIgh), F1 25 (DX12, High), Forza Horizon 5 (DX12, High), Far Cry 6 (DX12, High), FinalFantasy14 Dawntrail (2024) (DX11, High Desktop FSR), Grand Theft Auto V Enhanced (DX11, High), Hitman 3 (DX12, High Dubai), Hogwarts Legacy (DX12, High), Horizon Zero Dawn (DX12, Favor Quality), Indiana Jones and the Great Circle (DX12, Ultra), League of Legends (DX11, High), Monster Hunter Wilds (DX12, High), Red Dead Redemption 2 (DX12, High Default), Marvel's Spider-Man Remastered (DX12, High), Metro Exodus (DX12, High), Metro Exodus Enhanced Edition (DX12, Ultra), Marvel Rivals (DX12, High), Shadow of the Tomb Raider (DX12, High), Sid Meier's Civilization VII (DX12, High), Star Wars Outlaws (DX12, High), Starfield (DX12, High), Tiny Tina's Wonderlands (DX12, High), Warhammer 40,000: Space Marine 2 (DX12, High), Tom Clancy's Rainbow Six Siege (DX12, High), Watch Dogs: Legion (DX12, High). Performance data captured with latest game build as of December 17th, 2025. System manufacturers may vary configurations, yielding different results. GNR-56
5. Testing done by AMD performance labs December 2025, on a test system configured with Ryzen 7 9850X3D CPU, 32 GB DDR5-6000 Memory, Windows 11 Pro, X870E Motherboard, and Nvidia GeForce RTX 5090 (GeForce 581.29) , compared against a similarly configured system with Ryzen 7 9800X3D CPU, 32 GB DDR5-6000 Memory, Windows 11 Pro, X870E Motherboard, and Nvidia GeForce RTX 5090 (GeForce 581.29), as well as compared against a similarly configured system with Intel Core Ultra 9 285K, Z890 Motherboard, and 32GB DDR5-8000 Memory comparing productivity performance in the following applications: VRay 6.0.0, Cinebench 2024 1-thread, Geekbench 6.4.0 Single Core, Procyon Office - Office Productivity, PCMark 10 Extended, Procyon Photo Editing Score, Puget Bench for Creators Photoshop. System manufacturers may vary configurations, yielding different results. GNR-58